

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 09/905,083A
Source: 1FW16
Date Processed by STIC: 5/18/05

ENTERED

CRF Errors Edited by the STIC Systems Branch

Serial Number: 09/905,083A

CRF Edit Date: 5/19/05
Edited by: R

___ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

___ Corrected the SEQ ID NO. Sequence numbers edited were:

___ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

___ Deleted: invalid beginning/end-of-file text ; page numbers

___ Inserted mandatory headings/numeric identifiers, specifically:

___ Moved responses to same line as heading/numeric identifier, specifically:

___ Other:

Revised 09/09/2003



IFW16

RAW SEQUENCE LISTING

DATE: 05/19/2005

PATENT APPLICATION: US/09/905,083A

TIME: 13:15:38

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05192005\I905083A.raw

```

3 <110> APPLICANT: O'Brien, Timothy J.
5 <120> TITLE OF INVENTION: Method of Inducing Immunity Against Stratum
6   Corneum Chymotryptic Enzyme
8 <130> FILE REFERENCE: D6223CIP/C/Div
10 <140> CURRENT APPLICATION NUMBER: US 09/905,083A
11 <141> CURRENT FILING DATE: 2001-07-13
13 <150> PRIOR APPLICATION NUMBER: US 09/502,600
14 <151> PRIOR FILING DATE: 2000-02-11
16 <160> NUMBER OF SEQ ID NOS: 136
18 <210> SEQ ID NO: 1
19 <211> LENGTH: 23
20 <212> TYPE: DNA
21 <213> ORGANISM: Artificial sequence
23 <220> FEATURE:
25 <221> NAME/KEY: primer_bind
26 <222> LOCATION: 6, 9, 12, 15, 18
27 <223> OTHER INFORMATION: sense oligonucleotide primer for amplifying serine
28   proteases, n = Inosine
30 <400> SEQUENCE: 1
W--> 31 tgggtngtna cngcngcna ytg . 23
33 <210> SEQ ID NO: 2
34 <211> LENGTH: 20
35 <212> TYPE: DNA
36 <213> ORGANISM: Artificial sequence
38 <220> FEATURE:
40 <221> NAME/KEY: primer_bind
41 <222> LOCATION: 3, 6, 9, 12, 15, 18
42 <223> OTHER INFORMATION: antisense oligonucleotide primer for amplifying serine
43   proteases, n = Inosine
45 <400> SEQUENCE: 2
W--> 46 arnarngcna tntcnttncc 20
48 <210> SEQ ID NO: 3
49 <211> LENGTH: 20
50 <212> TYPE: DNA
51 <213> ORGANISM: Artificial sequence
53 <220> FEATURE:
55 <221> NAME/KEY: primer_bind
56 <222> LOCATION: 3, 6, 9, 12, 18
57 <223> OTHER INFORMATION: antisense oligonucleotide primer for amplifying serine
58   proteases, n = Inosine
60 <400> SEQUENCE: 3
W--> 61 arnggncnc cnswrtncc 20
63 <210> SEQ ID NO: 4

```

RAW SEQUENCE LISTING

DATE: 05/19/2005

PATENT APPLICATION: US/09/905,083A

TIME: 13:15:38

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05192005\I905083A.raw

```

64 <211> LENGTH: 24
65 <212> TYPE: DNA
66 <213> ORGANISM: Artificial sequence
68 <220> FEATURE:
70 <221> NAME/KEY: primer_bind
71 <222> LOCATION: 6, 15, 18
72 <223> OTHER INFORMATION: sense oligonucleotide primer for amplifying cysteine
73     proteases, n = Inosine
75 <400> SEQUENCE: 4
W--> 76 carggncart gyggnwsntg ytgg                24
78 <210> SEQ ID NO: 5
79 <211> LENGTH: 20
80 <212> TYPE: DNA
81 <213> ORGANISM: Artificial sequence
83 <220> FEATURE:
85 <221> NAME/KEY: primer_bind
86 <222> LOCATION: 3, 6, 15
87 <223> OTHER INFORMATION: antisense oligonucleotide primer for amplifying
88     cysteine proteases, n = Inosine
90 <400> SEQUENCE: 5
W--> 91 tancncrcrt trcanccytc                20
93 <210> SEQ ID NO: 6
94 <211> LENGTH: 20
95 <212> TYPE: DNA
96 <213> ORGANISM: Artificial sequence
98 <220> FEATURE:
100 <221> NAME/KEY: primer_bind
101 <222> LOCATION: 3, 6, 12, 15, 18
102 <223> OTHER INFORMATION: sense oligonucleotide primer for amplifying metallo-
103     proteases, n = Inosine
105 <400> SEQUENCE: 6
W--> 106 ccnmgntgyg gnrwnccnga                20
108 <210> SEQ ID NO: 7
109 <211> LENGTH: 17
110 <212> TYPE: DNA
111 <213> ORGANISM: Artificial sequence
113 <220> FEATURE:
115 <221> NAME/KEY: primer_bind
116 <222> LOCATION: 6, 9, 11
117 <223> OTHER INFORMATION: antisense oligonucleotide primer for amplifying
118     metallo-proteases, n = Inosine
120 <400> SEQUENCE: 7
W--> 121 ttrtgncna nytcrtg                17
123 <210> SEQ ID NO: 8
124 <211> LENGTH: 20
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial sequence
128 <220> FEATURE:
130 <221> NAME/KEY: primer_bind

```

RAW SEQUENCE LISTING

DATE: 05/19/2005

PATENT APPLICATION: US/09/905,083A

TIME: 13:15:38

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05192005\I905083A.raw

```

131 <223> OTHER INFORMATION: sense oligonucleotide primer specific for hepsin
133 <400> SEQUENCE: 8
134 tgtcccgatg gcgagtgttt                20
136 <210> SEQ ID NO: 9
137 <211> LENGTH: 20
138 <212> TYPE: DNA
139 <213> ORGANISM: Artificial sequence
141 <220> FEATURE:
143 <221> NAME/KEY: primer_bind
144 <223> OTHER INFORMATION: antisense oligonucleotide primer specific for hepsin
146 <400> SEQUENCE: 9
147 cctgttggcc atagtactgc                20
149 <210> SEQ ID NO: 10
150 <211> LENGTH: 20
151 <212> TYPE: DNA
152 <213> ORGANISM: Artificial sequence
154 <220> FEATURE:
156 <221> NAME/KEY: primer_bind
157 <223> OTHER INFORMATION: sense oligonucleotide primer specific for SCCE
159 <400> SEQUENCE: 10
160 agatgaatga gtacaccgtg                20
162 <210> SEQ ID NO: 11
163 <211> LENGTH: 20
164 <212> TYPE: DNA
165 <213> ORGANISM: Artificial sequence
167 <220> FEATURE:
169 <221> NAME/KEY: primer_bind
170 <223> OTHER INFORMATION: antisense oligonucleotide primer specific for SCCE
172 <400> SEQUENCE: 11
173 ccagtaagtc cttgtaaacc                20
175 <210> SEQ ID NO: 12
176 <211> LENGTH: 20
177 <212> TYPE: DNA
178 <213> ORGANISM: Artificial sequence
180 <220> FEATURE:
182 <221> NAME/KEY: primer_bind
183 <223> OTHER INFORMATION: sense oligonucleotide primer specific for CompB
185 <400> SEQUENCE: 12
186 aaggacacg agagctgtat                20
188 <210> SEQ ID NO: 13
189 <211> LENGTH: 20
190 <212> TYPE: DNA
191 <213> ORGANISM: Artificial sequence
193 <220> FEATURE:
195 <221> NAME/KEY: primer_bind
196 <223> OTHER INFORMATION: antisense oligonucleotide primer specific for CompB
198 <400> SEQUENCE: 13
199 aagtggtagt tggaggaagc                20
201 <210> SEQ ID NO: 14

```

RAW SEQUENCE LISTING

DATE: 05/19/2005

PATENT APPLICATION: US/09/905,083A

TIME: 13:15:38

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05192005\I905083A.raw

```

202 <211> LENGTH: 20
203 <212> TYPE: DNA
204 <213> ORGANISM: Artificial sequence
206 <220> FEATURE:
208 <221> NAME/KEY: primer_bind
209 <223> OTHER INFORMATION: sense oligonucleotide primer specific for Cath-L
211 <400> SEQUENCE: 14
212 attggagaga gaaaggctac                20
214 <210> SEQ ID NO: 15
215 <211> LENGTH: 20
216 <212> TYPE: DNA
217 <213> ORGANISM: Artificial sequence
219 <220> FEATURE:
221 <221> NAME/KEY: primer_bind
222 <223> OTHER INFORMATION: antisense oligonucleotide primer specific for Cath-L
224 <400> SEQUENCE: 15
225 cttgggattg tacttacagg                20
227 <210> SEQ ID NO: 16
228 <211> LENGTH: 20
229 <212> TYPE: DNA
230 <213> ORGANISM: Artificial sequence
232 <220> FEATURE:
234 <221> NAME/KEY: primer_bind
235 <223> OTHER INFORMATION: sense oligonucleotide primer specific for PUMP-1
237 <400> SEQUENCE: 16
238 cttccaaagt ggtcacctac                20
240 <210> SEQ ID NO: 17
241 <211> LENGTH: 20
242 <212> TYPE: DNA
243 <213> ORGANISM: Artificial sequence
245 <220> FEATURE:
247 <221> NAME/KEY: primer_bind
248 <223> OTHER INFORMATION: antisense oligonucleotide primer specific for PUMP-1
250 <400> SEQUENCE: 17
251 ctagactgct accatccgtc                20
253 <210> SEQ ID NO: 18
254 <211> LENGTH: 17
255 <212> TYPE: DNA
256 <213> ORGANISM: Artificial sequence
258 <220> FEATURE:
260 <221> NAME/KEY: primer_bind
261 <223> OTHER INFORMATION: sense oligonucleotide primer specific for (-tubulin
263 <400> SEQUENCE: 18
264 tgcattgaca acgaggc                    17
266 <210> SEQ ID NO: 19
267 <211> LENGTH: 17
268 <212> TYPE: DNA
269 <213> ORGANISM: Artificial sequence
271 <220> FEATURE:

```

RAW SEQUENCE LISTING

DATE: 05/19/2005

PATENT APPLICATION: US/09/905,083A

TIME: 13:15:38

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05192005\I905083A.raw

```

273 <221> NAME/KEY: primer_bind
274 <223> OTHER INFORMATION: antisense oligonucleotide primer specific for (-tubulin
276 <400> SEQUENCE: 19
277 ctgtcttgac attgttg                                     17
279 <210> SEQ ID NO: 20
280 <211> LENGTH: 20
281 <212> TYPE: DNA
282 <213> ORGANISM: Artificial sequence
284 <220> FEATURE:
286 <221> NAME/KEY: primer_bind
287 <223> OTHER INFORMATION: sense oligonucleotide primer specific for Protease M
289 <400> SEQUENCE: 20
290 ctgtgatcca ccctgactat                                   20
292 <210> SEQ ID NO: 21
293 <211> LENGTH: 20
294 <212> TYPE: DNA
295 <213> ORGANISM: Artificial sequence
297 <220> FEATURE:
299 <221> NAME/KEY: primer_bind
300 <223> OTHER INFORMATION: antisense oligonucleotide primer specific for Protease M
302 <400> SEQUENCE: 21
303 caggtggatg tatgcacact                                   20
305 <210> SEQ ID NO: 22
306 <211> LENGTH: 20
307 <212> TYPE: DNA
308 <213> ORGANISM: Artificial sequence
310 <220> FEATURE:
312 <221> NAME/KEY: primer_bind
313 <223> OTHER INFORMATION: sense oligonucleotide primer specific for TADG-12
315 <400> SEQUENCE: 22
316 gcgcactgtg tttatgagat                                   20
318 <210> SEQ ID NO: 23
319 <211> LENGTH: 20
320 <212> TYPE: DNA
321 <213> ORGANISM: Artificial sequence
323 <220> FEATURE:
325 <221> NAME/KEY: primer_bind
326 <223> OTHER INFORMATION: antisense oligonucleotide primer specific for TADG-12
328 <400> SEQUENCE: 23
329 ctctttggct tgtacttgct                                   20
331 <210> SEQ ID NO: 24
332 <211> LENGTH: 20
333 <212> TYPE: DNA
334 <213> ORGANISM: Artificial sequence
336 <220> FEATURE:
338 <221> NAME/KEY: primer_bind
339 <223> OTHER INFORMATION: sense oligonucleotide primer specific for TADG-13
341 <400> SEQUENCE: 24
342 tgagggacat cattatgcac                                   20

```

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/905,083A

DATE: 05/19/2005
TIME: 13:15:39

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF4\05192005\I905083A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 6,9,12,15,18
Seq#:2; N Pos. 3,6,9,12,15,18
Seq#:3; N Pos. 3,6,9,12,18
Seq#:4; N Pos. 6,15,18
Seq#:5; N Pos. 3,6,15
Seq#:6; N Pos. 3,6,12,15,18
Seq#:7; N Pos. 6,9,11

VERIFICATION SUMMARY

DATE: 05/19/2005

PATENT APPLICATION: US/09/905,083A

TIME: 13:15:39

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\05192005\I905083A.raw

L:31 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:46 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:61 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:76 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:91 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:106 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0

Raw Sequence Listing before editing,
for reference only



IFW16

RAW SEQUENCE LISTING

DATE: 05/18/2005

PATENT APPLICATION: US/09/905,083A

TIME: 12:10:52

Input Set : A:\D6223CIPCDSEQ.txt

Output Set: N:\CRF4\05182005\I905083A.raw

3 <110> APPLICANT: O'Brien, Timothy J.
5 <120> TITLE OF INVENTION: Method of Inducing Immunity Against Stratum
6 Corneum Chymotryptic Enzyme
8 <130> FILE REFERENCE: D6223CIP/C/Div
10 <140> CURRENT APPLICATION NUMBER: US 09/905,083A
11 <141> CURRENT FILING DATE: 2001-07-13
13 <150> PRIOR APPLICATION NUMBER: US 09/502,600
14 <151> PRIOR FILING DATE: 2000-02-11
16 <160> NUMBER OF SEQ ID NOS: 136

ERRORED SEQUENCES

1914 <210> SEQ ID NO: 136
1915 <211> LENGTH: 9
1916 <212> TYPE: PRT
1917 <213> ORGANISM: Homo sapiens
1919 <220> FEATURE:
1921 <221> NAME/KEY: CHAIN
1922 <223> OTHER INFORMATION: Residues 141-149 of the SCCE protein
1924 <400> SEQUENCE: 136
1925 Gly Thr Thr Cys Thr Val Ser Gly Trp
1926 5
1927 SEQ 34

E--> 1930 ??
E--> 1932 ??
E--> 1934 ??
E--> 1936 ??

**Does Not Comply
Corrected Diskette Needed**

VERIFICATION SUMMARY

DATE: 05/18/2005

PATENT APPLICATION: US/09/905,083A

TIME: 12:10:53

Input Set : A:\D6223CIPCDSEQ.txt

Output Set: N:\CRF4\05182005\I905083A.raw

L:31 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:46 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:61 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:76 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:91 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:106 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:121 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:1930 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:1930 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1
L:1932 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:136
L:1932 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:1932 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1
M:332 Repeated in SeqNo=136
L:1934 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:1934 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1
L:1936 M:333 E: Wrong sequence grouping, Amino acids not in groups!
L:1936 M:330 E: (2) Invalid Amino Acid Designator, NUMBER OF INVALID KEYS:1